

What is claimed:

1. Lock for a door to be locked with the following features:
 - 5 (a) a locking cylinder body being able to be introduced into a door;
 - (b) a knob for the outside of the door to be locked, the knob being able to be actuated from the outside of the door in order to open the door from the outside;
 - 10 (c) a deactivation member which is able to deactivate the knob so that opening of the door using the knob is not possible, the deactivation member being able to be electronically actuated;
 - (d) an access control means which in response to an authorized transponder signal permits opening of the door by making it possible for the user to actuate the knob from the outside of the door in order to open it;
 - 15 (e) wherein the access control means comprising electronic and mechanical elements is located within the locking cylinder body.
2. Lock according to claim 1, the lock body is adapted and sized to be introduced into a door according to U.S. standards or European standards.
- 20 3. Lock according to claim 1, wherein the deactivation member is adapted to deactivate the knob such that idle movement of the knob is possible.
4. Lock according to claim 1, wherein the deactivation member is adapted to deactivate the knob such that movement of the knob is blocked.
- 25 5. Lock according to claim 1, wherein the access control means comprises means for exchanging a wireless signal with a transponder and a verification means for verifying whether or not the transponder is authorized.

6. Lock according to claim 1, further comprising a battery energizing the access control means upon response of a request signal from a transponder.
- 5 7. Lock according to claim 1, wherein the access control means comprises a ferrit bar antenna which is also located within the cylindrical lock body.
8. Lock according to claim 1, wherein the access control means is adapted to communicate with a transponder by means of an alternating magnetic field.
- 10 9. Lock according to claim 1, further comprising protection means for protecting against drilling or tampering with the lock.
- 15 10. Lock according to claim 1, further comprising an engagement means for transmitting a movement as well as corresponding forces and/or moments, the engagement means having a drive mechanism and a take-off mechanism, wherein the drive mechanism and the take-off mechanism are coupled via at least one coupling element in such a manner that in a decoupled state a movement of the drive mechanism causes a movement of the coupling element, wherein the movement of the coupling element is not sufficient for transmitting a movement of the drive mechanism to the take-off mechanism so that transmission of movement is allowed in the coupled state but not in the decoupled state.
- 20 11. Lock according to claim 10, wherein the drive mechanism and take off mechanism are coupled via the coupling element in such a manner that in the decoupled state a rotational movement of the drive mechanism causes an essentially axial and/or radial movement of the coupling element and that in a coupled state a rotational movement of the drive mechanism essentially causes a rotational movement of the take-off mechanism.
- 25 12. Transponder for a door lock having an access control means comprising:

means for exchanging a wireless data signal with the access control means of the door lock; and

means for detecting biometric information of a user, wherein transmission of the data signal to the access control means of the lock is enabled or disabled depending on the biometric information detected.

13. Transponder according to claim 12, wherein the biometric information is a fingerprint.

14. Door lock system comprising:

a lock having a lock body, a knob being able to be actuated from the outside of the door in order to open the door from the outside a deactivation member, which is able to deactivate the knob so that it cannot be actuated in order to open the door from the outside and an access control means which in response to a data signal from an authorized user permits opening of the door by making it possible for the user to actuate the knob from the outside of the door in order to open it, wherein the access control means comprising electronic and mechanical elements is located within the cylindrical lock body; and

a transponder having means for exchanging a wireless data signal with the access control means of the lock.

15. Method for securing a lock for a door comprising:

providing a lock body being of generally cylindrical shape and being able to be introduced into a door;

providing a knob for the outside of the door to be locked, the knob being able to be actuated from the outside of the door in order to open the door from the outside;

providing a deactivation member which is able to deactivate the knob so that it cannot be actuated in order to open the door from the outside;

providing an access control means which in response to a signal of an authorized transponder permits opening of the door by making it

possible for the user to actuate the knob from the outside of the door in order to open it; and

providing the access control means within the cylindrical lock body, the access control means comprising electronic and mechanical elements.

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